

### Listing of Claims:

1. (Currently Amended) A method comprising:

b) passing the labeled proteins, polypeptides or peptides through one or more nanopores;

c) detecting labeled amino acid residues in the labeled proteins, polypeptides or peptides;

d) compiling an amino acid distance map for each type of labeled amino acid; and

e) identifying the protein based on the distance maps.

2. (Currently Amended) The method of claim 1, further comprising:

a) placing a template nucleic acid into ~~at least one~~each chamber, ~~each chamber to contain a~~  
different type of labeled amino acid; and

b) producing one or more labeled proteins, polypeptides or peptides encoded by the template nucleic acid.

3. (Original) The method of claim 1, further comprising: a) obtaining one or more proteins, polypeptides or peptides from a biological sample; and b) labeling the proteins, polypeptides or peptides post-translationally.









